

Photometric Test Report

Relevant Standards

- ☒ ANSI/IES LM-79-2019
- ☒ ANSI C82.77-2017

Prepared For

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Issue Date: 2025-08-21

Revised Date: N/A

1.0 Test Summary

Wall mount Luminaire					
Requirement Category		Test Method	Requirements		Test Value
Luminaire Output (lm) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	N/A		1789
Minimum Luminaire Efficacy (lm/W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Standard	Premium	120.1
			N/A	N/A	
Power (Input Wattage) (W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		14.9
Total Harmonic Distortion (A%) (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	N/A	120V	4.73
				277V	20.97
Power Factor (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	N/A	120V	0.994
				277V	0.916
Allowable CCTs* (K) (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019	7 steps	3985±275	4041
			4 steps	3985±154	
Minimum CRI (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019 CIE13.3-1995	≥80		92.0
Minimum R9 (Integrating Sphere – Section 4.1)		ANSI/IES LM-79-2019 CIE13.3-1995	≥0		81
Minimum Rf (Integrating Sphere – Section 4.1)		ANSI/IES TM-30-18	≥70		87
Minimum Rg (Integrating Sphere – Section 4.1)		ANSI/IES TM-30-18	≥89		95
IES Rcs,h1 (Integrating Sphere – Section 4.1)		ANSI/IES TM-30-18	-12%≤IES Rcs,h1≤+23%		-3%
Zonal Lumen Requirement (0°-60°) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	N/A		26.7%
Backlight, Uplight and Glare (BUG) Ratings (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019 IES TM-15-11	N/A		B0-U4-G2
Input Voltage (V)					
(Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Cast		277.0
(Goniophotometer – Section 4.2)			Non-Worst Case		120.0
Input Current (A)					
(Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		0.059
(Goniophotometer – Section 4.2)			Non-Worst Case		0.120
Power (Input Wattage – W)					
(Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		14.9
(Goniophotometer – Section 4.2)			Non-Worst Case		14.3

2.0 Test List

Test Item	Test	Test Date	Model Number	Build Level	Sample No.
1	Integrating Sphere Test	2025-08-07	V1-24 @15W4000K	-	250728007-S1
2	Goniophotometer Test	2025-08-07	V1-24 @15W4000K	-	250728007-S1
3	THD and PF Test	2025-08-07	V1-24 @15W4000K	-	250728007-S1

Remark (If any):

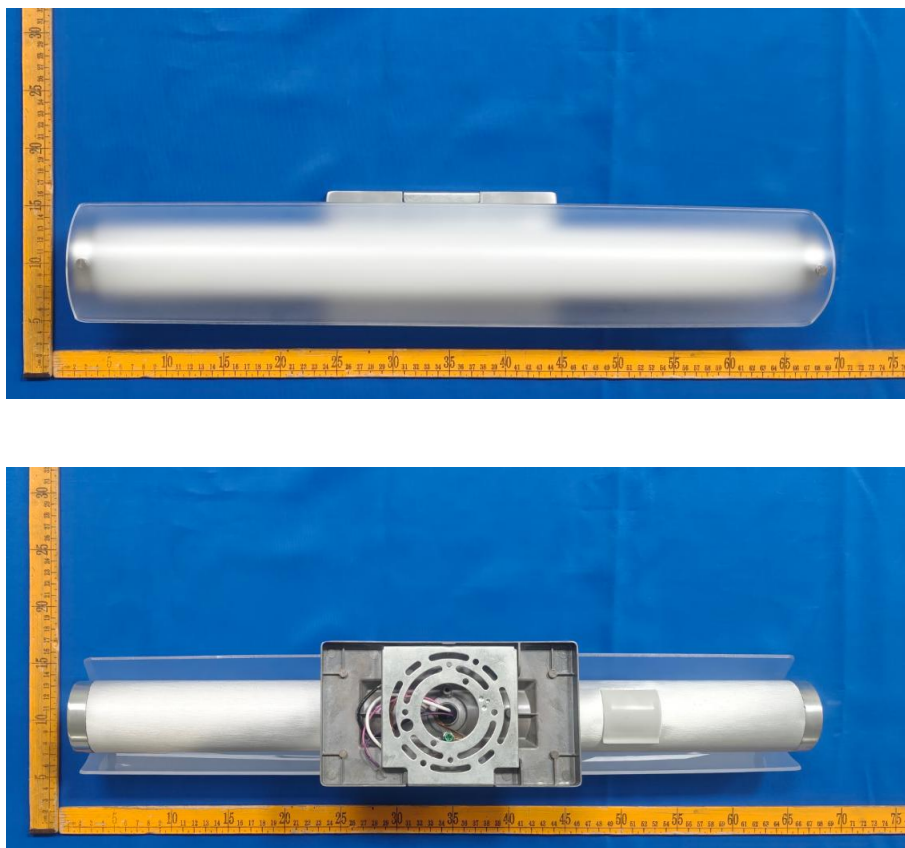
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3. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the U.S. Government.

3.0 Product Description

Luminaire Description: Model No. V1-24 @15W4000K, color tunable from 2700K, 3000K, 3500K, 4000K and 5000K.

Electrical Specification: 120-277Vac, 50/60Hz

Photos of Luminaire Characteristics



4.0 LM-79 Measurement and Test Results

4.1 Integrating Sphere Test

Model No.	V1-24 @15W4000K	Sample ID	250728007-S1
Operate time (Min.)	10	Stabilization time (Min.)	60
Temperature (°C)	25.4	Humidity (%RH)	41.0

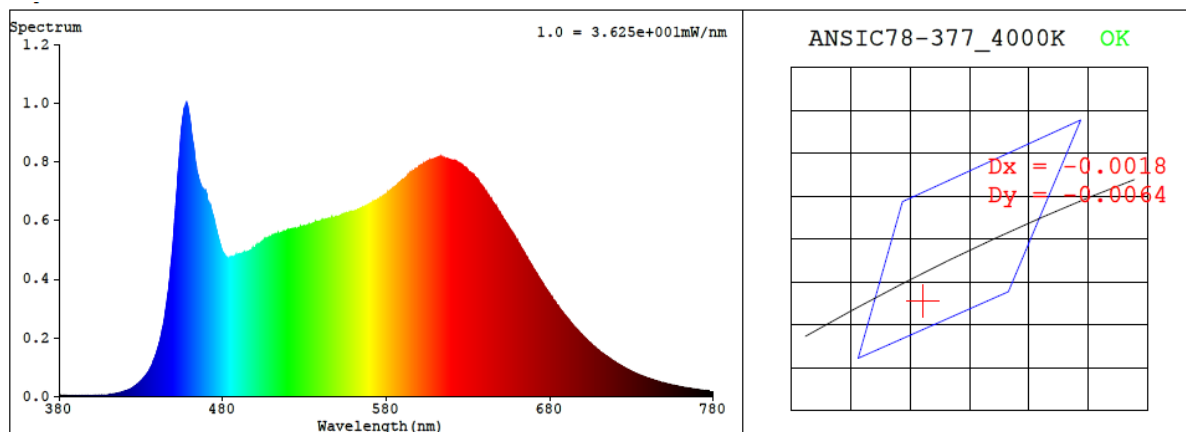
Test Method
<p>The Samples were tested according to the ANSI/IES LM-79:2019.</p> <p>Photometric parameters were measured using an integrating sphere, a spectroradiometer and software. The ambient temperature condition inside the sphere was maintained at 25±1°C.</p> <p>The sample measurements were made using a spectroradiometer connected by a fiber optic cable and detector through the detector port of the integrating sphere.</p> <p>The voltage of an AC power supply (RMS voltage) or DC power supply (instantaneous voltage) applied to the device under test shall be regulated to within ±0.2 percent under load.</p> <p>The sample was measured using 4π geometry and operated at rated voltage and was stabilized before measurement. Chromaticity coordinates, correlated color temperature and color rendering index were calculated from the spectral radiant flux measurements taken at 1 nm intervals over the range of 380 to 780nm.</p>

Test Result

Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor
120.0	60	0.120	14.3	0.994
277.0	60	0.059	14.9	0.916

CCT (K)	CRI	R9	Duv	SDCM	Rf	Rg	IES Rcs,h1
4041	92.0	81	-0.0025	4.0	87	95	-3%

4.1 Integrating Sphere Test



Colorimetric Parameters

Chromaticity Coordinate: $x = 0.3768$ $y = 0.3692$ / $u' = 0.2257$ $v' = 0.4977$ ($duv = -2.50e-03$)

CCT= 4041K Prp WL: $L_d = 580.4\text{nm}$ Purity=23.9%

Peak WL: $L_p = 458\text{nm}$ FWHM: $= 30.6\text{nm}$ Ratio: $R = 20.7\%$ $G = 73.8\%$ $B = 5.5\%$

Render Index: $R_a = 92.0$ AvgR = 90.9 TM30: $R_f = 89$ $R_g = 97$

EEL: 0.11835 A+

R1 =97 R2 =95 R3 =93 R4 =91 R5 =94 R6 =91 R7 =88

R8 =87 R9 =81 R10=90 R11=95 R12=74 R13=96 R14=97 R15=95

4.1 Integrating Sphere Test

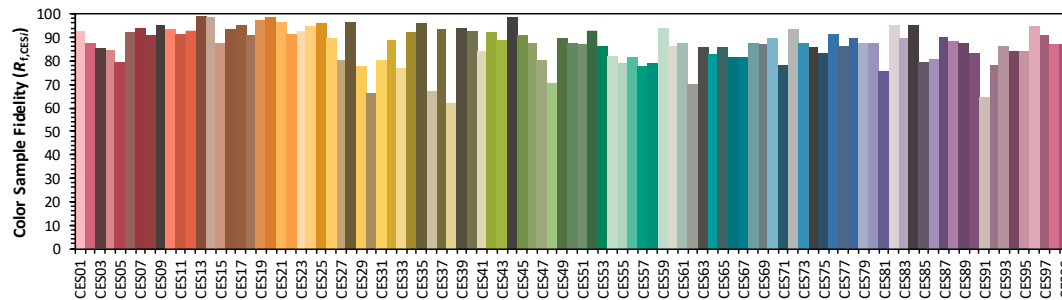
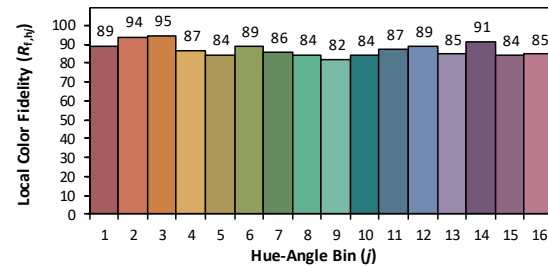
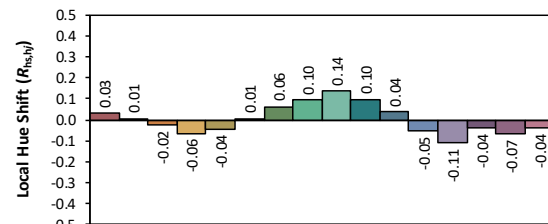
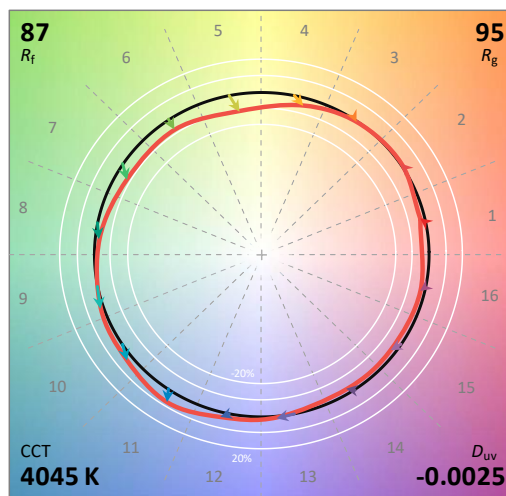
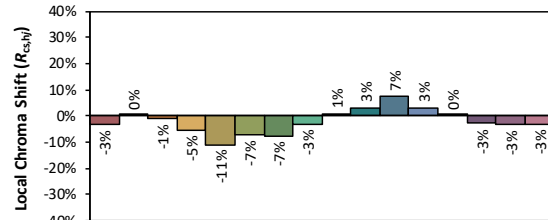
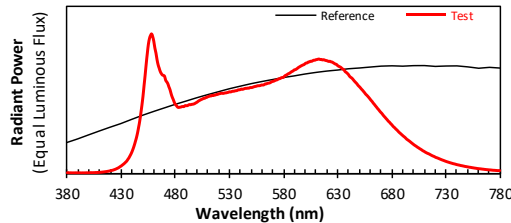
ANSI/IES TM-30-18 Color Rendition Report

Source: 1 CIE F1

Manufacturer: RAB Lighting Inc

Date: 2025/8/21

Model: V1-24 @15W4000K



Notes: This is a recommended method for displaying ANSI/IES TM-30-18 information.

x 0.3768
 y 0.3691
 u' 0.2258
 v' 0.4976

CIE 13.3-1995
(CRI)

R_a 92
 R_g 82

4.1 Integrating Sphere Test

Spectral Distribution over Visible Wavelength											
WL (nm)	Radiant (W/nm)	WL (nm)	Radiant (W/nm)	WL (nm)	Radiant (W/nm)	WL (nm)	Radiant (W/nm)	WL (nm)	Radiant (W/nm)	WL (nm)	Radiant (W/nm)
380	3.30E-06	447	3.73E-04	514	5.57E-04	581	6.95E-04	648	6.39E-04	715	1.37E-04
381	3.90E-06	448	4.27E-04	515	5.55E-04	582	7.00E-04	649	6.28E-04	716	1.32E-04
382	2.00E-06	449	4.85E-04	516	5.59E-04	583	7.04E-04	650	6.21E-04	717	1.28E-04
383	2.90E-06	450	5.50E-04	517	5.60E-04	584	7.09E-04	651	6.12E-04	718	1.24E-04
384	2.40E-06	451	6.26E-04	518	5.63E-04	585	7.13E-04	652	6.03E-04	719	1.21E-04
385	2.40E-06	452	7.01E-04	519	5.63E-04	586	7.17E-04	653	5.95E-04	720	1.17E-04
386	2.40E-06	453	7.82E-04	520	5.68E-04	587	7.24E-04	654	5.85E-04	721	1.13E-04
387	2.50E-06	454	8.56E-04	521	5.69E-04	588	7.28E-04	655	5.76E-04	722	1.10E-04
388	2.90E-06	455	9.22E-04	522	5.71E-04	589	7.33E-04	656	5.66E-04	723	1.07E-04
389	2.30E-06	456	9.63E-04	523	5.72E-04	590	7.39E-04	657	5.58E-04	724	1.04E-04
390	2.70E-06	457	9.85E-04	524	5.71E-04	591	7.41E-04	658	5.50E-04	725	1.01E-04
391	2.70E-06	458	9.96E-04	525	5.72E-04	592	7.45E-04	659	5.41E-04	726	9.74E-05
392	2.60E-06	459	9.77E-04	526	5.74E-04	593	7.51E-04	660	5.31E-04	727	9.43E-05
393	2.00E-06	460	9.44E-04	527	5.75E-04	594	7.57E-04	661	5.21E-04	728	9.16E-05
394	2.60E-06	461	8.96E-04	528	5.77E-04	595	7.62E-04	662	5.13E-04	729	8.85E-05
395	2.30E-06	462	8.60E-04	529	5.79E-04	596	7.66E-04	663	5.02E-04	730	8.55E-05
396	2.50E-06	463	8.13E-04	530	5.82E-04	597	7.70E-04	664	4.93E-04	731	8.28E-05
397	2.70E-06	464	7.76E-04	531	5.81E-04	598	7.74E-04	665	4.83E-04	732	8.03E-05
398	3.10E-06	465	7.51E-04	532	5.84E-04	599	7.77E-04	666	4.74E-04	733	7.78E-05
399	2.70E-06	466	7.27E-04	533	5.87E-04	600	7.84E-04	667	4.63E-04	734	7.53E-05
400	3.00E-06	467	7.13E-04	534	5.86E-04	601	7.88E-04	668	4.55E-04	735	7.31E-05
401	3.60E-06	468	7.02E-04	535	5.89E-04	602	7.89E-04	669	4.45E-04	736	7.07E-05
402	4.10E-06	469	6.99E-04	536	5.90E-04	603	7.96E-04	670	4.36E-04	737	6.84E-05
403	3.60E-06	470	6.93E-04	537	5.91E-04	604	7.96E-04	671	4.28E-04	738	6.67E-05
404	4.00E-06	471	6.65E-04	538	5.96E-04	605	8.01E-04	672	4.17E-04	739	6.47E-05
405	4.00E-06	472	6.53E-04	539	5.96E-04	606	8.00E-04	673	4.08E-04	740	6.23E-05
406	4.80E-06	473	6.40E-04	540	5.98E-04	607	8.04E-04	674	4.00E-04	741	6.05E-05
407	4.80E-06	474	6.18E-04	541	6.02E-04	608	8.08E-04	675	3.90E-04	742	5.88E-05
408	5.40E-06	475	5.98E-04	542	6.00E-04	609	8.08E-04	676	3.82E-04	743	5.72E-05
409	5.80E-06	476	5.70E-04	543	6.02E-04	610	8.12E-04	677	3.72E-04	744	5.50E-05
410	6.40E-06	477	5.46E-04	544	6.05E-04	611	8.13E-04	678	3.65E-04	745	5.38E-05
411	6.80E-06	478	5.27E-04	545	6.07E-04	612	8.16E-04	679	3.56E-04	746	5.20E-05
412	7.60E-06	479	5.07E-04	546	6.07E-04	613	8.16E-04	680	3.49E-04	747	5.04E-05
413	8.60E-06	480	4.92E-04	547	6.09E-04	614	8.13E-04	681	3.39E-04	748	4.84E-05
414	9.40E-06	481	4.83E-04	548	6.08E-04	615	8.14E-04	682	3.31E-04	749	4.73E-05
415	1.07E-05	482	4.73E-04	549	6.13E-04	616	8.10E-04	683	3.24E-04	750	4.57E-05
416	1.15E-05	483	4.70E-04	550	6.13E-04	617	8.12E-04	684	3.16E-04	751	4.43E-05
417	1.30E-05	484	4.72E-04	551	6.13E-04	618	8.10E-04	685	3.09E-04	752	4.28E-05
418	1.43E-05	485	4.73E-04	552	6.16E-04	619	8.07E-04	686	3.00E-04	753	4.19E-05
419	1.59E-05	486	4.76E-04	553	6.19E-04	620	8.05E-04	687	2.92E-04	754	4.04E-05
420	1.80E-05	487	4.77E-04	554	6.21E-04	621	8.02E-04	688	2.86E-04	755	3.91E-05
421	1.98E-05	488	4.77E-04	555	6.23E-04	622	8.00E-04	689	2.79E-04	756	3.78E-05
422	2.15E-05	489	4.83E-04	556	6.25E-04	623	8.01E-04	690	2.72E-04	757	3.64E-05
423	2.42E-05	490	4.83E-04	557	6.26E-04	624	7.97E-04	691	2.65E-04	758	3.55E-05
424	2.68E-05	491	4.83E-04	558	6.26E-04	625	7.95E-04	692	2.59E-04	759	3.39E-05
425	3.01E-05	492	4.87E-04	559	6.29E-04	626	7.90E-04	693	2.52E-04	760	3.31E-05
426	3.39E-05	493	4.91E-04	560	6.31E-04	627	7.85E-04	694	2.44E-04	761	3.20E-05
427	3.76E-05	494	4.90E-04	561	6.31E-04	628	7.81E-04	695	2.38E-04	762	3.13E-05
428	4.22E-05	495	4.92E-04	562	6.33E-04	629	7.78E-04	696	2.32E-04	763	3.04E-05
429	4.78E-05	496	4.93E-04	563	6.38E-04	630	7.71E-04	697	2.27E-04	764	2.93E-05
430	5.26E-05	497	4.95E-04	564	6.39E-04	631	7.65E-04	698	2.20E-04	765	2.85E-05
431	5.89E-05	498	4.99E-04	565	6.42E-04	632	7.62E-04	699	2.14E-04	766	2.73E-05
432	6.49E-05	499	5.04E-04	566	6.44E-04	633	7.57E-04	700	2.08E-04	767	2.66E-05
433	7.16E-05	500	5.08E-04	567	6.45E-04	634	7.50E-04	701	2.02E-04	768	2.55E-05
434	7.94E-05	501	5.14E-04	568	6.49E-04	635	7.44E-04	702	1.97E-04	769	2.50E-05
435	8.70E-05	502	5.19E-04	569	6.54E-04	636	7.39E-04	703	1.92E-04	770	2.40E-05
436	9.88E-05	503	5.23E-04	570	6.57E-04	637	7.27E-04	704	1.86E-04	771	2.36E-05
437	1.10E-04	504	5.28E-04	571	6.58E-04	638	7.22E-04	705	1.81E-04	772	2.29E-05
438	1.24E-04	505	5.31E-04	572	6.62E-04	639	7.15E-04	706	1.76E-04	773	2.19E-05
439	1.39E-04	506	5.35E-04	573	6.66E-04	640	7.07E-04	707	1.71E-04	774	2.11E-05
440	1.57E-04	507	5.36E-04	574	6.68E-04	641	6.95E-04	708	1.66E-04	775	2.08E-05
441	1.77E-04	508	5.41E-04	575	6.72E-04	642	6.87E-04	709	1.61E-04	776	2.01E-05
442	2.01E-04	509	5.42E-04	576	6.76E-04	643	6.82E-04	710	1.57E-04	777	1.95E-05
443	2.28E-04	510	5.47E-04	577	6.78E-04	644	6.74E-04	711	1.51E-04	778	1.88E-05
444	2.55E-04	511	5.49E-04	578	6.83E-04	645	6.64E-04	712	1.47E-04	779	1.88E-05
445	2.89E-04	512	5.53E-04	579	6.84E-04	646	6.56E-04	713	1.43E-04	780	1.88E-05
446	3.30E-04	513	5.53E-04	580	6.86E-04	647	6.47E-04	714	1.40E-04	N/A	N/A

4.0 LM-79 Measurement and Test Results

4.2 Goniophotometer Test

Model No.	V1-24 @15W4000K	Sample ID	250728007-S1
Operate time (Min.)	30	Stabilization time (Min.)	60
Temperature (°C)	24.9	Humidity (%RH)	42.1

Test Method
<p>The Samples were tested according to the ANSI/IES LM-79:2019.</p> <p>Photometric parameters were measured using a type C goniophotometer and software.</p> <p>The ambient temperature shall be maintained at $25 \pm 1^\circ\text{C}$, measured at a point not more than 1 m from the sample and at the same height as the sample.</p> <p>The voltage of an AC power supply (RMS voltage) or DC power supply (instantaneous voltage) applied to the device under test shall be regulated to within ± 0.2 percent under load.</p> <p>The samples were operated at rated voltage and was stabilized before measurement. Luminous flux, luminaire efficacy, zonal lumen were calculated from the software taken at 1.0° vertical intervals and 15° horizontal intervals.</p>

Test Conditions

Condition	Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor
WORST CASE	277.0	60	0.059	14.9	0.916
NON-WORST CASE	120.0	60	0.120	14.3	0.994

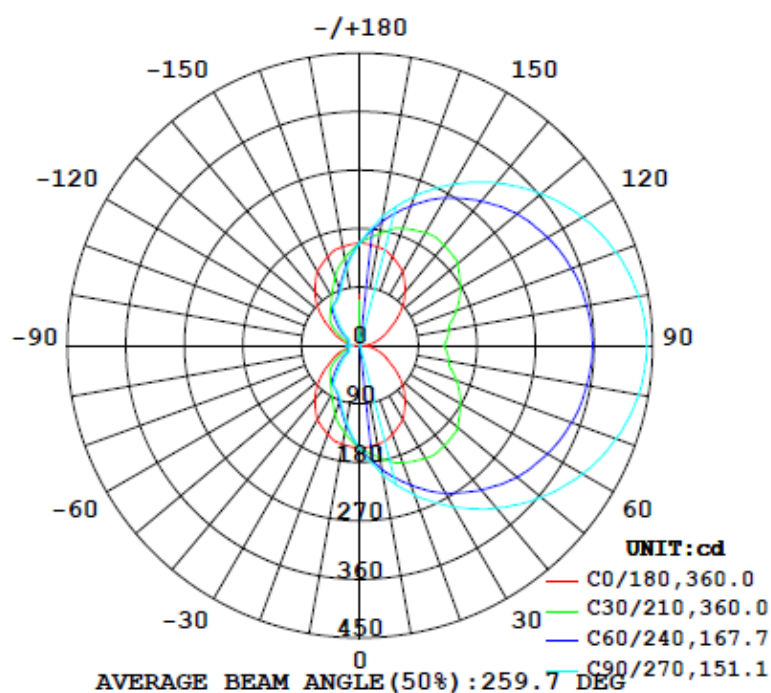
Test Result

Flux (lm)	Field Angle (10%)		Beam Angle (50%)		Luminous Efficacy (lm/W)	Zonal Lumen Requirement	BUG
	C0-180	C90-270	C0-180	C90-270		(0°-60°)	
1789	90.8	155.3	180.0	98.1	120.1	26.7%	B0-U4-G2

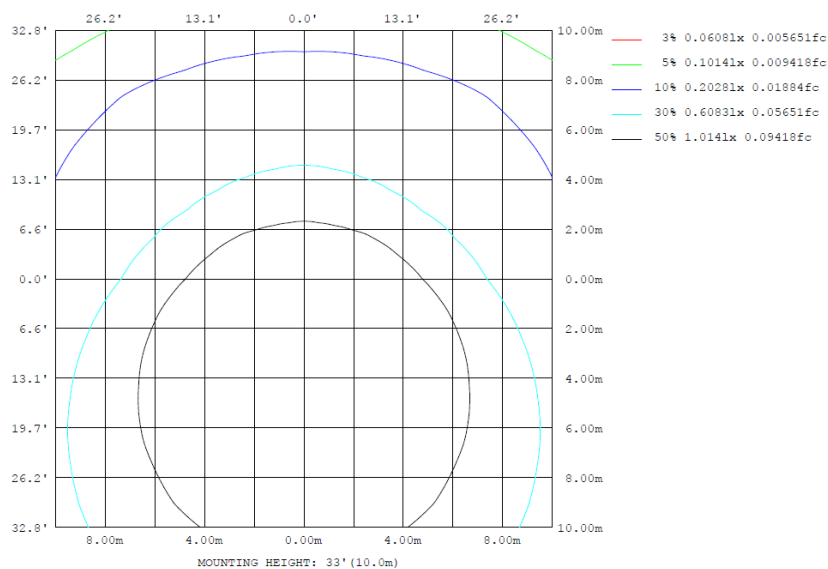
4.2 Goniophotometer Test

Lighting Distribution Curve

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



Isolux Plot



4.2 Goniophotometer Test

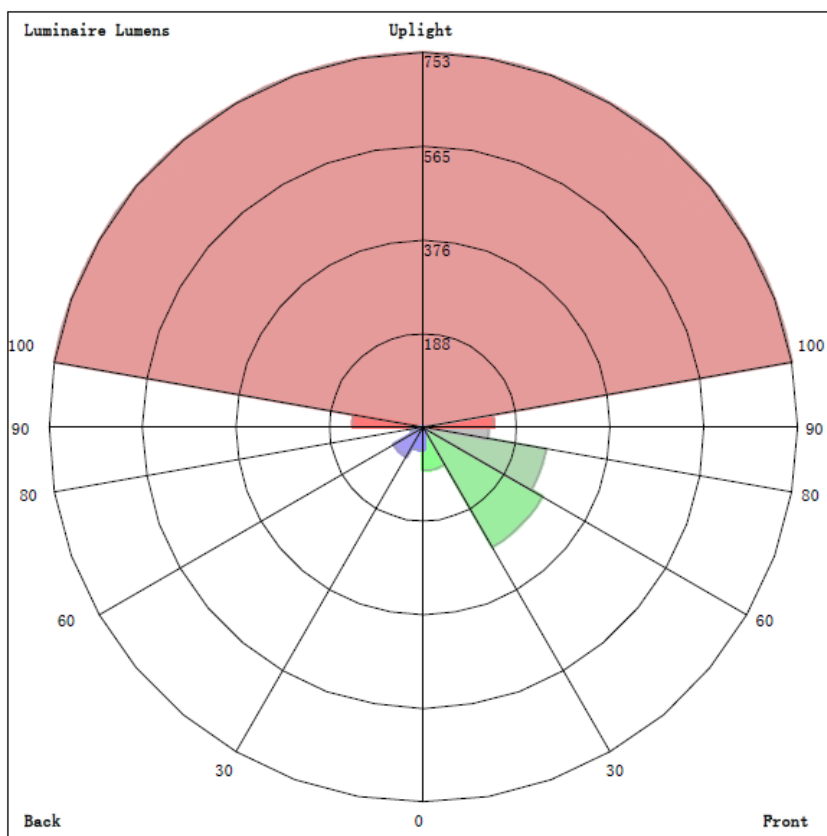
Zonal Lumen Summary

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	154.4	184.7	201.7	184.7	154.4	129.4	121.1	129.4	0- 10	15.04	15.04	0.84,0.84
20	145.5	213.0	244.1	213.0	145.5	100.9	88.86	100.9	10- 20	44.51	59.55	3.33,3.33
30	131.7	233.3	286.9	233.3	131.7	78.99	76.91	78.99	20- 30	72.25	131.8	7.37,7.37
40	107.7	250.8	326.4	250.8	107.7	70.31	56.47	70.31	30- 40	98.14	229.9	12.9,12.9
50	81.50	260.1	363.7	260.1	81.50	51.03	35.09	51.03	40- 50	117.7	347.6	19.4,19.4
60	53.09	263.2	395.0	263.2	53.09	31.58	19.48	31.58	50- 60	129.6	477.2	26.7,26.7
70	34.95	262.7	418.6	262.7	34.95	20.34	18.39	20.34	60- 70	136.1	613.2	34.3,34.3
80	18.49	256.9	435.2	256.9	18.49	19.74	17.40	19.74	70- 80	139.6	752.8	42.1,42.1
90	3.711	254.2	440.7	254.2	3.711	21.51	20.61	21.51	80- 90	141.6	894.4	50,50
100	18.49	256.9	435.2	256.9	18.49	19.74	17.40	19.74	90-100	141.6	1036	57.9,57.9
110	34.95	262.7	418.6	262.7	34.95	20.34	18.39	20.34	100-110	139.6	1176	65.7,65.7
120	53.09	263.2	395.0	263.2	53.09	31.58	19.48	31.58	110-120	136.1	1312	73.3,73.3
130	81.50	260.1	363.7	260.1	81.50	51.03	35.09	51.03	120-130	129.6	1441	80.6,80.6
140	107.7	250.8	326.4	250.8	107.7	70.31	56.47	70.31	130-140	117.7	1559	87.1,87.1
150	131.7	233.3	286.9	233.3	131.7	78.99	76.91	78.99	140-150	98.14	1657	92.6,92.6
160	145.5	213.0	244.1	213.0	145.5	100.9	88.86	100.9	150-160	72.25	1729	96.7,96.7
170	154.4	184.7	201.7	184.7	154.4	129.4	121.1	129.4	160-170	44.51	1774	99.2,99.2
180	158.5	158.5	158.5	158.5	158.5	158.5	158.5	158.5	170-180	15.04	1789	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT: lm		

Zonal (lm)		Total (lm)		Percent
0-10	15.04	0-10	15.04	0.85%
10-20	44.51	0-20	59.55	3.36%
20-30	72.25	0-30	131.80	7.43%
30-40	98.14	0-40	229.94	12.96%
40-50	117.66	0-50	347.60	19.60%
50-60	129.57	0-60	477.17	26.90%
60-70	136.06	0-70	613.23	34.57%
70-80	139.61	0-80	752.84	42.44%
80-90	141.60	0-90	894.44	50.42%
90-100	141.60	0-100	1036.04	58.41%
100-110	139.61	0-110	1175.65	66.28%
110-120	136.06	0-120	1311.71	73.95%
120-130	129.57	0-130	1441.28	81.25%
130-140	117.66	0-140	1558.94	87.89%
140-150	98.14	0-150	1657.08	93.42%
150-160	72.25	0-160	1729.33	97.49%
160-170	44.51	0-170	1773.84	100.00%
170-180	15.04	0-180	1788.88	100.85%

4.2 Goniophotometer Test

LCS/BUG

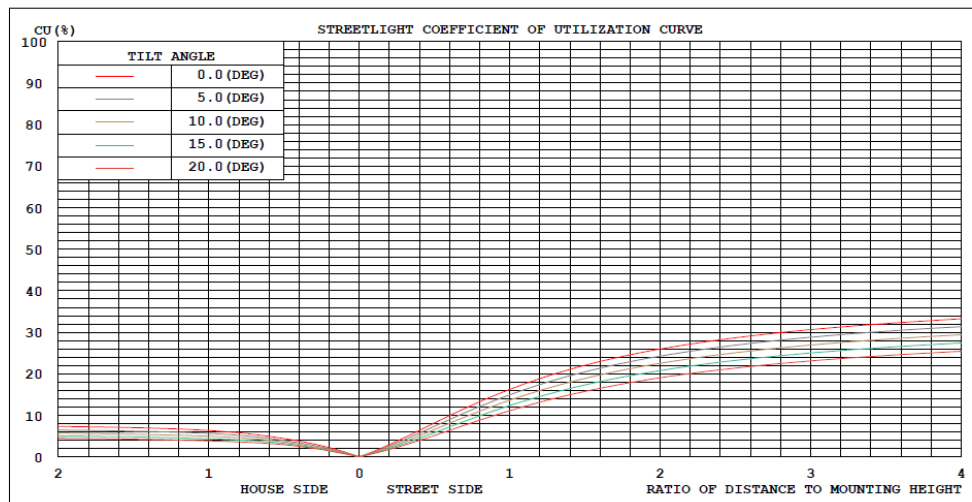


LUMINAIRE CLASSIFICATION SYSTEM (LCS)

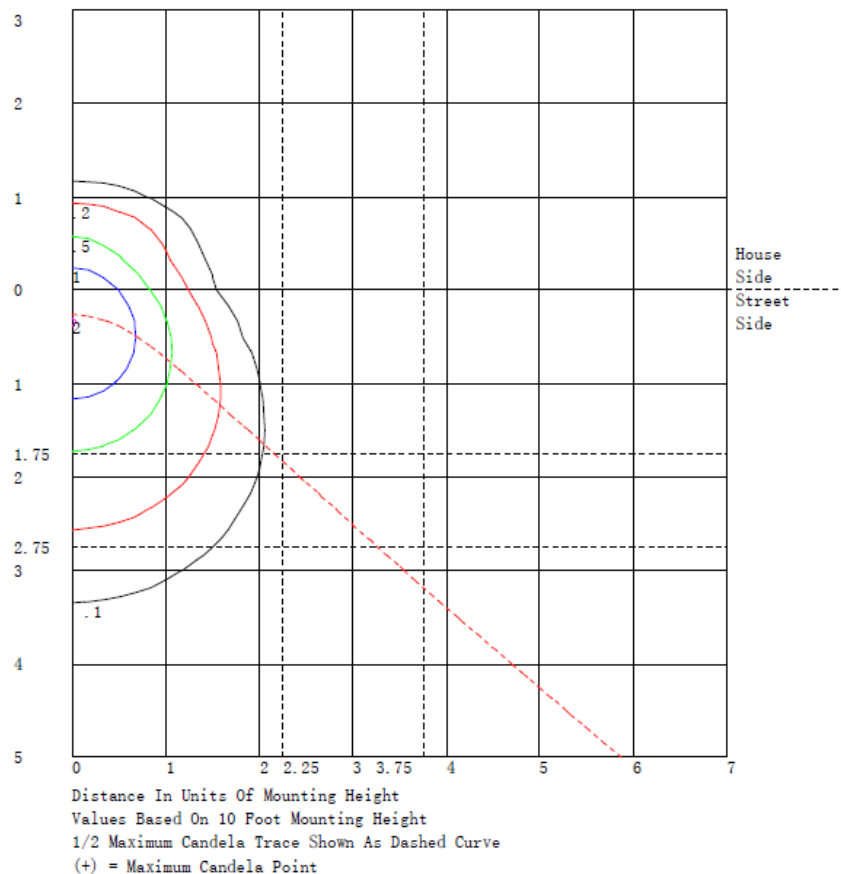
	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	86.1	N.A.	4.8
FM - Front-Medium (30-60)	277.5	N.A.	15.5
FH - Front-High (60-80)	250.6	N.A.	14.0
FVH - Front-Very High (80-90)	131.5	N.A.	7.4
BL - Back-Low (0-30)	45.7	N.A.	2.6
BM - Back-Medium (30-60)	67.8	N.A.	3.8
BH - Back-High (60-80)	25.0	N.A.	1.4
BVH - Back-Very High (80-90)	10.1	N.A.	0.6
UL - Uplight-Low (90-100)	141.6	N.A.	7.9
UH - Uplight-High (100-180)	752.8	N.A.	42.1
Total	1788.7	N.A.	100.0
BUG Rating	B0-U4-G2		

4.2 Goniophotometer Test

Coefficients of Utilization



Isolines



4.2 Goniophotometer Test

Luminous Distribution Intensity Data

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270
0	158	158	158	158	158	158	158	158	158	158	158	158	158	158	158	158	158	158	158
5	156	162	166	171	175	177	178	177	175	171	166	162	156	152	148	144	142	140	140
10	154	165	175	185	193	199	202	199	193	185	175	165	154	145	137	129	124	121	121
15	152	167	185	200	211	219	224	219	211	200	185	167	152	138	126	115	107	104	104
20	145	167	192	213	228	239	244	239	228	213	192	167	145	128	113	101	92.9	89.2	88.9
25	139	166	197	223	246	259	266	259	246	223	197	166	139	117	98.8	88.2	82.5	80.1	80.4
30	132	165	201	233	262	279	287	279	262	233	201	165	132	106	87.4	79.0	77.0	76.5	76.9
35	120	160	203	242	276	299	307	299	276	242	203	160	120	93.0	78.1	73.3	74.0	72.5	71.2
40	108	153	201	251	290	317	326	317	290	251	201	153	108	80.9	70.5	70.3	65.4	58.5	56.5
45	95.7	145	199	255	303	335	346	335	303	255	199	145	95.7	69.8	65.3	63.3	52.4	46.7	44.7
50	81.5	132	196	260	315	351	364	351	315	260	196	132	81.5	61.4	60.6	51.0	41.8	36.8	35.1
55	67.3	117	187	263	324	365	380	365	324	263	187	117	67.3	54.0	52.2	40.3	32.8	28.6	27.3
60	53.1	101	178	263	333	379	395	379	333	263	178	101	53.1	47.3	42.0	31.6	24.4	20.6	19.5
65	44.0	88.2	169	264	340	391	408	391	340	264	169	88.2	44.0	39.8	32.4	23.9	19.9	18.8	18.5
70	34.9	75.5	158	263	346	401	419	401	346	263	158	75.5	34.9	31.8	25.9	20.3	19.7	18.8	18.4
75	25.9	62.1	146	260	351	409	428	409	351	260	146	62.1	25.9	23.6	20.2	19.9	19.7	18.9	18.3
80	18.5	58.7	139	257	354	415	435	415	354	257	139	58.7	18.5	21.6	18.8	19.7	19.4	18.6	17.4
85	11.1	55.9	135	257	357	418	439	418	357	257	135	55.9	11.1	20.4	19.8	20.6	19.9	16.7	15.8
90	3.71	52.6	129	254	357	420	441	420	357	254	129	52.6	3.71	19.3	20.8	21.5	21.2	17.3	20.6
95	11.1	55.9	135	257	357	418	439	418	357	257	135	55.9	11.1	20.4	19.8	20.6	19.9	16.7	15.8
100	18.5	58.7	139	257	354	415	435	415	354	257	139	58.7	18.5	21.6	18.8	19.7	19.4	18.6	17.4
105	25.9	62.1	146	260	351	409	428	409	351	260	146	62.1	25.9	23.6	20.2	19.9	19.7	18.9	18.3
110	34.9	75.5	158	263	346	401	419	401	346	263	158	75.5	34.9	31.8	25.9	20.3	19.7	18.8	18.4
115	44.0	88.2	169	264	340	391	408	391	340	264	169	88.2	44.0	39.8	32.4	23.9	19.9	18.8	18.5
120	53.1	101	178	263	333	379	395	379	333	263	178	101	53.1	47.3	42.0	31.6	24.4	20.6	19.5
125	67.3	117	187	263	324	365	380	365	324	263	117	67.3	54.0	52.2	40.3	32.8	28.6	27.3	
130	81.5	132	196	260	315	351	364	351	315	260	196	132	81.5	61.4	60.6	51.0	41.8	36.8	35.1
135	95.7	145	199	255	303	335	346	335	303	255	199	145	95.7	69.8	65.3	63.3	52.4	46.7	44.7
140	108	153	201	251	290	317	326	317	290	251	201	153	108	80.9	70.5	70.3	65.4	58.5	56.5
145	120	160	203	242	276	299	307	299	276	242	203	160	120	93.0	78.1	73.3	74.0	72.5	71.2
150	132	165	201	233	262	279	287	279	262	233	201	165	132	106	87.4	79.0	77.0	76.5	76.9
155	139	166	197	223	246	259	266	259	246	223	197	166	139	117	98.8	88.2	82.5	80.1	80.4
160	145	167	192	213	228	239	244	239	228	213	192	167	145	128	113	101	92.9	89.2	88.9
165	152	167	185	200	211	219	224	219	211	200	185	167	152	138	126	115	107	104	104
170	154	165	175	185	193	199	202	199	193	185	175	165	154	145	137	129	124	121	121
175	156	162	166	171	175	177	178	177	175	171	166	162	156	152	148	144	142	140	140
180	158	158	158	158	158	158	158	158	158	158	158	158	158	158	158	158	158	158	158

Table--2

UNIT: cd

C (DEG) γ (DEG)	285	300	315	330	345														
0	158	158	158	158	158														
5	140	142	144	148	152														
10	121	124	129	137	145														
15	104	107	115	126	138														
20	89.2	92.9	101	113	128														
25	80.1	82.5	88.2	98.8	117														
30	76.5	77.0	79.0	87.4	106														
35	72.5	74.0	73.3	78.1	93.0														
40	58.5	65.4	70.3	70.5	80.9														
45	46.7	52.4	63.3	65.3	69.8														
50	36.8	41.8	51.0	60.6	61.4														
55	28.6	32.8	40.3	52.2	54.0														
60	20.6	24.4	31.6	42.0	47.3														
65	18.8	19.9	23.9	32.4	39.8														
70	18.8	19.7	20.3	25.9	31.8														
75	18.9	19.7	19.9	20.2	23.6														
80	18.6	19.4	19.7	18.8	21.6														
85	16.7	19.9	20.6	19.8	20.4														
90	17.3	21.2	21.5	20.8	19.3														
95	16.7	19.9	20.6	19.8	20.4														
100	18.6	19.4	19.7	18.8	21.6														
105	18.9	19.7	19.9	20.2	23.6														
110	18.8	19.7	20.3	25.9	31.8														
115	18.8	19.9	23.9	32.4	39.8														
120	20.6	24.4	31.6	42.0	47.3														
125	28.6	32.8	40.3	52.2	54.0														
130	36.8	41.8	51.0	60.6	61.4														
135	46.7	52.4	63.3	65.3	69.8														
140	58.5	65.4	70.3	70.5	80.9														
145	72.5	74.0	73.3	78.1	93.0														
150	76.5	77.0	79.0	87.4	106														
155	80.1	82.5	88.2	98.8	117														
160	89.2	92.9	101	113	128														
165	104	107	115	126	138														
170	121	124	129	137	145														
175	140	142	144	148	152														
180	158	158	158	158	158														

4.0 LM-79 Measurement and Test Results

4.3 THD and PF Test

Model No.	V1-24 @15W4000K	Sample ID	250728007-S1
Temperature (°C)	25.4	Humidity (%RH)	41.0

Test Method
<p>The samples were tested according to the and Ansi C82.77: 2002 and ANSI C82.77-10:2020</p> <p>The total harmonic distortion shall be measured to the 40th order.</p> <p>The ambient temperature shall be maintained at $25 \pm 1^{\circ}\text{C}$. The sample measurements were made using a digital power meter and power supply. The sample was operated at rated voltage and was stabilized before measurement. The total harmonic distortion was calculated.</p>

Test Results

Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	iTHD(%)
120.0	60	0.120	14.3	0.994	4.73
277.0	60	0.059	14.9	0.916	20.97

5.0 Equipment List:

Equipment ID	Equipment Name	Last Cal.	Due Cal.
NTC-F01-001	Goniophotometer System	2024-11-07	2025-11-06
NTC-F01-006	2.0 meter Integrating Sphere	2024-11-07	2025-11-06
NTC-F01-012	Standard Lamp	2024-10-28	2025-10-27
NTC-F01-013	Standard Lamp	2024-10-28	2025-10-27
NTC-F01-031	Digital Power Meter	2025-08-04	2026-08-03
NTC-F01-019	Temperature & Humidity Meter	2024-10-29	2025-10-28

*****End of Report*****